



## CASE STUDY: IN-VESSEL COMPOSTING

Case Study	IN-VESSEL COMPOSTING
Location	Eastern Asia
Target	Capacity increase/product enhancement
Composter Capacity	10 tn/day (conventional)
Composting material	Poultry manure with additives
Details	5 days pre-treatment of material in windrow pile with mixing



Parameter	Units	BEFORE YDRO PRODUCTS Application	AFTER YDRO PRODUCTS Application
Processed material capacity	tn/day	10	15
Operational Temperature	°C	40 – 45 (with external heating)	>60 (without external heating)
Maturity	%	<80%	>80%
pH	-	>8	6 – 8 (stabilized)
C:N	-	Unstable	10:1 – 15:1 (stabilized)
N-P-K	-	Unstable	2 – 5 – 4 (typical value)

### Remarks

- Increased production capacity by 50%
- Increased composting efficiency
- Decreased processing time (batch duration)
- Increased in-vessel temperature by at least 15°C reducing induced heating cost
- Improved N-P-K values and C:N ratio despite the very high ammonia content
- Product odour reduction / elimination
- Improved compost quality (maturity, efficiency etc.)